

**REMARKS**

Claims 1-12 have been canceled, and new claims 13-19 have been added.

Rejections Under § 112: In the pending Office Action, claims 1-12 stand rejected under 35 U.S.C. § 112, second paragraph, for use of a number of indefinite and confusing terms several instances of lack of antecedent basis, and other informalities. In response to this rejection, the Applicants have amended the claims by canceling claims 1-12 and completely rewritten the claims as new claims 13-19 to address the § 112 issues. In view of these amendments, reconsideration and withdrawal of the pending § 112, second paragraph rejection is respectfully requested.

Objection to the Abstract: The Abstract stands objected to as being in improper form. The Applicants have amended the Abstract to conform to U.S. practice. Withdrawal of the pending objection is respectfully requested.

Rejections Under § 103(a): Claims 1-10 stand rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent Publication US2003/0158632 A1 (“Nierlich”) in view of U.S. Patent No. 4,902,322 to Grinblat (“Grinblat”), and claims 11-12 stand rejected under § 103(a) as unpatentable over Nierlich and Grinblat in further view of U.S. Patent No. 5,351,712 to Houlihan (“Houlihan”).

The Applicants respectfully traverse the pending rejections under § 103(a) on the grounds that the cited the references do not teach or suggest the features of the present invention recited in claims 13-19.

The present invention is directed to a system for supplying heating and cooling to a user, in which a plurality of portable heating and/or cooling units are

provided to the user, the units are monitored over a network such as the Internet, and recommendations for increasing or decreasing the number of heating or cooling units and/or replacing existing units with units of higher or lower capacity are made based on the extent of the monitored variation of the amount of heating or cooling used by the user from each unit. In this manner, the heating and cooling supplied to the user is optimized to provide maximum energy efficiency and lower costs. Further, where at least some of the units are leased, the lease rate charged to the user using the present heating and cooling supply system may be based at least in part on the extent of variation in heating and cooling used by the user.

In contrast, the Nierlich reference discloses a system which compares monitored energy use with available energy supplies, and commands curtailment and/or shutdown of load using energy if the available energy supply is inadequate. Nierlich ¶ [0003]. Unlike the present invention, Nierlich teaches nothing with regard to optimizing energy efficient supply of heating and cooling.

Where Nierlich simply cuts off power to users when supplies are inadequate, the present invention's monitoring of heating and cooling use is coupled with a determination of *whether the user's heating and cooling equipment needs to be optimized to improve efficiency*. The present invention thus effectively provides real-time optimization of heating and cooling equipment deployment in order to closely match equipment operating at peak energy efficiency to the user's actual energy needs, thereby saving both energy and energy costs. Nierlich neither teaches or suggests any such matching of heating

and cooling demand to efficient equipment deployment, and Grinblat does not cure Nierlich's deficiencies.

Grinblat is cited as teaching a system for supplementing an existing building air conditioning system by installing supplemental air conditioning units for individual tenants. As with Nierlich, Grinblat teaches nothing with regard to *optimizing energy efficiency* of an installed heating or cooling system. Indeed, Grinblat teaches *inefficient* distribution of cooling equipment, wherein additional cooling equipment is installed to satisfy a tenant, without regard to the efficiency of the equipment, or any consideration of adjustment of equipment capacity to match the tenant's actual cooling requirements.

There is no suggestion or motivation in Grinblat or Nierlich (or elsewhere) to combine these references, as no combination will result in the present invention as recited in claim 13 and its dependent claims. The addition of Grinblat's supplemental air conditioning units to Nierlich's energy demand reduction system does little more than provide additional units for Nierlich's system to shut down when energy supplies are inadequate. In other words, no combination of these references results in the present invention's monitoring of variation in heating and cooling equipment use and using the monitored variation to optimize heating and cooling equipment distribution and/or unit capacity to maximize efficient energy use.

Because no combination of the Nierlich and Grinblat references would result in the invention recited in claim 13 and its dependent claims 14-19, these

claims are patentable over these references under § 103(a).<sup>1</sup> The Applicants respectfully request reconsideration and withdrawal of the pending § 103(a) rejections.

### CONCLUSION


Applicants respectfully submit that the application is now in condition of allowance. Early and favorable consideration and issuance of a Notice of Allowance for claims 13-19 is respectfully requested.

If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response. Please charge any such fee or any deficiency in fees, or credit any overpayment of fees, to Deposit Account No. 05-1323 (Docket 199.49908US).

June 17, 2004

Respectfully submitted,



J.D. Evans

Registration No. 26,269

Mark H. Neblett

Registration No. 42,028

CROWELL & MORING, LLP  
P.O. Box 14300  
Washington, DC 20044-4300  
Telephone No.: (202) 624-2500  
Facsimile No.: (202) 628-8844

---

<sup>1</sup> Houlihan is cited as teaching the use of portable hot water recovery units. Because this reference teaches nothing addressing the above-described deficiencies of Nierlich and Grinblat, the claims also are patentable under § 103(a) over any combination of these references with Houlihan.